

REMARKS

The Applicant has carefully reviewed the Office Action mailed September 12, 2007 and offers the following remarks to accompany the above amendments.

The Patent Office kindly suggested how the Specification should be laid out. As noted above, the Specification has been amended to include various subheadings.

Claims 1-4 and 31-49 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,242,989 B1 to *Barber et al.* (hereinafter “*Barber*”). The Applicant respectfully traverses the rejection.

According to Chapter 2131 of the M.P.E.P., in order to anticipate a claim under 35 U.S.C. § 102, “the reference must teach every element of the claim.” The Applicant submits that *Barber* does not disclose every element recited in claims 1-4 and 31-49. Thus, *Barber* cannot anticipate claims 1-4 and 31-49. More specifically, claim 1 recites that a “facing surface of at least one plate has a roughened surface.” Claim 41 includes similar features. The Applicant submits that *Barber* does not disclose a facing surface of a capacitor plate having a roughened surface. In maintaining the rejection, the Patent Office states that *Barber* discloses this feature in Figure 7.¹ The Applicant respectfully disagrees. Figure 7 discloses a multi-port variable capacitor 702 having a movable plate 708 and electrodes 716, 718, 720, and 722. However, as may be clearly seen, the movable plate 708 and the electrodes 716, 718, 720, and 722 have a smooth surface.² Similarly, the Applicant has reviewed the text describing Figure 7 along with the remainder of the reference and submits that nowhere does *Barber* disclose that a surface of the movable plate 708, a surface of the electrodes 716, 718, 720, and 722, or anything else for that matter, has a roughened surface.

Claim 1 also recites that “the degree of roughness being sufficient to prevent the facing surfaces adhering together.” Claim 41 includes similar features. The Applicant submits that *Barber* does not disclose that a degree of roughness of a facing surface of a capacitor plate is sufficient to prevent adherence between facing surfaces of capacitor plates. The Patent Office supports the rejection by asserting that *Barber* discloses this feature in Figure 7.³ The Applicant respectfully disagrees for a number of reasons. First, as detailed above, *Barber* does not disclose that a face of a capacitor plate has a roughened surface. Thus, it follows that *Barber* cannot

¹ See Office Action mailed September 12, 2007, pages 3 and 5.

² See *Barber*, Figure 7.

³ See Office Action mailed September 12, 2007, pages 3 and 5.

disclose that a degree of roughness of a facing surface of a capacitor plate is sufficient to prevent adherence between facing surfaces of capacitor plates.

Second, even assuming, *arguendo*, that *Barber* did somehow disclose that a face of a capacitor plate has a roughened surface, *Barber* still does not disclose preventing capacitor plates from adhering to one another. The Applicant has reviewed *Barber* and submits that nowhere does the reference disclose anything about adherence between faces of capacitor plates, much less a degree of roughness of a facing surface of a capacitor plate, which is sufficient to prevent adherence between facing surfaces of capacitor plates. Accordingly, claims 1 and 41 are patentable over the cited reference and the Applicant requests that the rejection be withdrawn. Likewise, claims 2-4, 31, 32, 35-37, 40, 42-44, and 46-49, which variously depend from either claim 1 or 41, are patentable for at least the same reasons, along with the novel features recited therein.

Claim 33, which ultimately depends from claim 1, recites that a second plate of the capacitor is “flexible.” The Applicant submits that *Barber* does not disclose that a second plate of a capacitor is flexible. In maintaining the rejection, the Patent Office states that Figure 7 of *Barber* discloses this feature.⁴ The Applicant respectfully disagrees. While Figure 7 of *Barber* does disclose the multi-port variable capacitor 702 having the movable plate 708 and the electrodes 716, 718, 720, and 722, as may be clearly seen with reference to Figure 7, the movable plate 708 and the electrodes 716, 718, 720, and 722 are rigid structures, which are not flexible. Moreover, the Applicant has reviewed the text describing Figure 7 along with the remainder of *Barber* and submits that nowhere does the reference disclose that the movable plate 708 and the electrodes 716, 718, 720, and 722 are flexible.

Claim 33 also recites that the second plate of the capacitor is “movable by virtue of its flexibility.” As detailed above, *Barber* does not disclose that the capacitor plates disclosed therein are flexible. Thus, it follows that none of the capacitor plates disclosed in *Barber* are moveable due to their flexibility. Therefore, in addition to the reasons noted above with reference to claim 1, claim 33 is patentable over *Barber* and the Applicant requests that the rejection be withdrawn.

Claim 34, which depends from claim 33, recites that a second plate of the capacitor comprises an intermediate portion that is “flexible.” The Applicant submits that *Barber* does not

⁴*Id.* at page 4.

disclose a capacitor plate having a flexible intermediate portion. Nonetheless, the Patent Office supports the rejection by asserting that *Barber* discloses this feature in Figure 7.⁵ The Applicant respectfully disagrees. As detailed above, neither Figure 7, nor anywhere else in *Barber*, discloses a flexible capacitor plate. Similarly, nowhere does *Barber* disclose that a capacitor plate has a flexible intermediate portion. For this reason and the reasons noted above with respect to claim 33, claim 34 is patentable over *Barber* and the Applicant requests that the rejection be withdrawn.

Claim 38, which ultimately depends from claim 1, recites that a roughened surface of a facing surface of a first capacitor plate is dissimilar to a roughened surface of a facing surface of a second capacitor plate. The Applicant submits that *Barber* does not disclose that a roughened surface of a facing surface of a first capacitor plate is dissimilar to a roughened surface of a facing surface of a second capacitor plate. The Patent Office supports the rejection by stating that Figure 7 of *Barber* discloses this feature.⁶ The Applicant respectfully disagrees for a number of reasons. First, as detailed above, *Barber* does not disclose that a facing surface of a capacitor plate has a roughened surface. Thus, it follows that *Barber* cannot disclose that a roughened surface of a facing surface of a first capacitor plate is dissimilar to a roughened surface of a facing surface of a second capacitor plate.

Second, even assuming, *arguendo*, that *Barber* did somehow disclose that faces of first and second capacitor plates have roughened surfaces, the Applicant submits that nowhere, either in Figure 7 or anywhere else, does *Barber* disclose anything about a roughened surface of first capacitor plate being dissimilar from a roughened surface of a second capacitor plate. Thus, claim 38 is patentable over *Barber* for these reasons in addition to the reasons noted above with reference to claim 1.

Claim 39, which ultimately depends from claim 1, recites that a “dissimilarity is at least in part caused by the action of a sacrificial material used in the fabrication process.” The Applicant submits that *Barber* does not disclose that a dissimilarity between a roughened surface of a first capacitor plate and a roughened surface of a second capacitor plate is caused in part by an action of sacrificial material used during a fabrication process. In maintaining the rejection,

⁵ *Ibid.*

⁶ *Id.* at page 5.

the Patent Office asserts that *Barber* discloses this feature in Figure 7.⁷ The Applicant respectfully disagrees for a number of reasons. First, as detailed above, *Barber* does not disclose that a first capacitor plate and a second capacitor plate have a roughened surface. Second, even assuming, *arguendo*, that *Barber* did disclose that a first capacitor plate and a second capacitor plate have a roughened surface, as detailed above, *Barber* does not disclose that a roughened surface of a first capacitor plate is dissimilar to a roughened surface of a second capacitor plate. Third, even assuming, *arguendo*, that *Barber* did somehow disclose that a roughened surface of a first capacitor plate is dissimilar to a roughened surface of a second capacitor plate, *Barber* still does not disclose that the dissimilarities are caused in part by an action of a sacrificial material used during a fabrication process. The Applicant has reviewed the text associated with Figure 7 along with the remainder of the reference and submits that nowhere does *Barber* disclose this feature. Therefore, in addition to the reasons noted above, claim 39 is patentable over the cited references and the Applicant requests that the rejection be withdrawn.

Claim 45, which depends from claim 41, recites that a first capacitor plate is fabricated with roughened surface and a second capacitor plate is formed with an inverse of the roughened surface. The Applicant submits that *Barber* does not disclose that a first capacitor plate is fabricated with a roughened surface and a second capacitor plate is formed with an inverse of the roughened surface. Nevertheless, the Patent Office supports the rejection by asserting that the entire document of *Barber* discloses this feature.⁸ The Applicant respectfully disagrees. As noted above, the Applicant has reviewed *Barber* and submits that nowhere does *Barber* mention anything about a first capacitor plate having a roughened surface. Furthermore, the Applicant submits that nowhere does *Barber* disclose that a second capacitor plate is formed with an inverse of the roughened surface. Thus, in addition to the reasons noted above with reference to claim 41, claim 45 is patentable over *Barber* and the Applicant requests that the rejection be withdrawn.

The present application is now in a condition for allowance and such action is respectfully requested. The Examiner is encouraged to contact the Applicant's representative regarding any remaining issues in an effort to expedite allowance and issuance of the present application.

⁷ *Ibid.*

⁸ *Ibid.*

Respectfully submitted,

WITHROW & TERRANOVA, P.L.L.C.

By:



Anthony J. Josephson

Registration No. 45,742

100 Regency Forest Drive, Suite 160

Cary, NC 27518

Telephone: (919) 238-2300

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